

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-6. (Canceled)

7. (Currently Amended) A system ~~according to claim 5, wherein~~ communication system comprising:

a first transmitting/receiving apparatus configured to transmit multiplexed program data to be transmitted from the first transmitting/receiving apparatus to a second transmitting/receiving apparatus, first transfer schedule table information indicating a schedule of the program data, and second transfer schedule table information concerning data to be transmitted from the second transmitting/receiving apparatus to the first transmitting/receiving apparatus, to filter means;

the second transmitting/receiving apparatus configured to transmit data to the first transmitting/ receiving apparatus, based on the second transfer schedule table information transmitted from the second transmitting/receiving apparatus; and

a filter unit configured to receive the first transfer schedule table information and the second transfer schedule table information transmitted from the first transmitting/receiving apparatus, for filtering data transmitted from the first transmitting/ receiving apparatus, based on the first transfer schedule table information, and for filtering data transmitted from the second transmitting/receiving apparatus to the first

transmitting/receiving apparatus, based on the second transfer schedule table information,

wherein

the first transmitting/receiving apparatus transmits downstream data transmitted from the first transmitting/receiving apparatus to the second transmitting/receiving apparatus, schedule data which specifies contents of the downstream data by means of frequency and time, and schedule data for upstream data transmitted from the second transmitting/receiving apparatus to the first transmitting/receiving apparatus,

the filter unit transmits the schedule data for the downstream data and that for the upstream data requested by the second transmitting/receiving apparatus, to the second transmitting/receiving apparatus, and transmits the upstream data to the first transmitting/receiving apparatus,

the second transmitting/receiving apparatus transmits the upstream data and information for filtering the downstream data by the filter unit, to the filter unit, and

the filter unit comprises:

a CPU for controlling entirely the filter unit;

a first reception interface for receiving transmitted data and schedule data from the first transmitting/receiving apparatus;

a first filter circuit connected with the CPU and the first reception interface, to filter downstream data, based on control by the CPU;

a first transmission interface for transmitting data outputted from the first filter circuit;

a second reception interface for receiving data transmitted from the second transmitting/receiving apparatus;

an A/D converter for analog-to-digital-converting transmission schedule data received through the first reception interface and the first filter circuit;

a third reception interface for receiving the upstream data;

a second filter circuit for filtering upstream data received through the third reception interface; and

a second transmission interface for transmitting upstream data filtered by the second filter circuit, to the first transmitting/receiving apparatus, wherein

the second filter circuit is controlled so as to receive data in a procedure which is the same as that taken for receiving the schedule data for downstream data, and

the second reception interface receives the upstream data through a route different from a route through which the first reception interface receives the transmitted data and the schedule data from the first transmitting/receiving apparatus.

8. (Currently Amended) ~~A system according to claim 5, wherein~~ communication system comprising:

a first transmitting/receiving apparatus configured to transmit multiplexed program data to be transmitted from the first transmitting/receiving apparatus to a second transmitting/receiving apparatus, first transfer schedule table information indicating a schedule of the program data, and second transfer schedule table information concerning data to be transmitted from the second transmitting/receiving apparatus to the first transmitting/receiving apparatus, to filter means;

the second transmitting/receiving apparatus configured to transmit data to the first transmitting/ receiving apparatus, based on the second transfer schedule table information transmitted from the second transmitting/receiving apparatus; and

a filter unit configured to receive the first transfer schedule table information and the second transfer schedule table information transmitted from the first transmitting/receiving apparatus, for filtering data transmitted from the first transmitting/receiving apparatus, based on the first transfer schedule table information, and for filtering data transmitted from the second transmitting/receiving apparatus to the first transmitting/receiving apparatus, based on the second transfer schedule table information,

wherein

the first transmitting/receiving apparatus transmits downstream data transmitted from the first transmitting/receiving apparatus to the second transmitting/receiving apparatus, schedule data which specifies contents of the downstream data by means of frequency and time, and schedule data for upstream data transmitted from the second transmitting/receiving apparatus to the first transmitting/receiving apparatus,

the filter unit transmits the schedule data for the downstream data and that for the upstream data requested by the second transmitting/receiving apparatus, to the second transmitting/receiving apparatus, and transmits the upstream data to the first transmitting/receiving apparatus,

the second transmitting/receiving apparatus transmits the upstream data and information for filtering the downstream data by the filter unit, to the filter unit, and

the filter unit comprises:

a CPU for controlling entirely the filter unit;

a first reception interface for receiving transmitted data and schedule data from the first transmitting/receiving apparatus;

a first filter circuit connected with the CPU and the first reception interface, to filter downstream data, based on control by the CPU;

a first transmission interface for transmitting data outputted from the first filter circuit;

a second reception interface for receiving the upstream data and information for filtering downstream data;

a second filter circuit for filtering upstream data received through the second reception interface;

a second transmission interface for transmitting upstream data filtered by the second filter circuit, to the first transmitting/receiving apparatus; and

an A/D converter for analog-to-digital-converting data from the second transmitting/receiving apparatus received through the second reception interface and the second filter circuit, wherein

information for filtering downstream data which the second reception interface receives and upstream data which the first reception interface receives are received through one same route.

9. (Canceled)

10. (Currently Amended) ~~A system according to claim 5, wherein~~
communication system comprising:

a first transmitting/receiving apparatus configured to transmit multiplexed program data to be transmitted from the first transmitting/receiving apparatus to a second transmitting/receiving apparatus, first transfer schedule table information indicating a schedule of the program data, and second transfer schedule table information concerning data to be transmitted from the second transmitting/receiving apparatus to the first transmitting/receiving apparatus, to filter means;

the second transmitting/receiving apparatus configured to transmit data to the first transmitting/ receiving apparatus, based on the second transfer schedule table information transmitted from the second transmitting/receiving apparatus; and

a filter unit configured to receive the first transfer schedule table information and the second transfer schedule table information transmitted from the first transmitting/receiving apparatus, for filtering data transmitted from the first transmitting/receiving apparatus, based on the first transfer schedule table information, and for filtering data transmitted from the second transmitting/receiving apparatus to the first transmitting/receiving apparatus, based on the second transfer schedule table information,

wherein

the first transmitting/receiving apparatus transmits downstream data transmitted from the first transmitting/receiving apparatus to the second transmitting/receiving apparatus, schedule data which specifies contents of the downstream data by means of

frequency and time, and schedule data for upstream data transmitted from the second transmitting/receiving apparatus to the first transmitting/receiving apparatus,

the filter unit transmits the schedule data for the downstream data and that for the upstream data requested by the second transmitting/receiving apparatus, to the second transmitting/receiving apparatus, and transmits the upstream data to the first transmitting/receiving apparatus,

the second transmitting/receiving apparatus transmits the upstream data and information for filtering the downstream data by the filter unit, to the filter unit, and,

in a time slot, schedule data for upstream data, which the first transmitting/receiving apparatus transmits, includes information concerning time and frequency assigned to the second transmitting/receiving apparatus, schedule data for transmitting request data for receiving an assigned time which the second transmitting/receiving apparatus requests, and time and frequency at which the second transmitting/receiving apparatus transmits filter information for the filter unit, and

in the same time slot, data transmitted from the second transmitting/receiving apparatus to the first transmitting/receiving apparatus includes data transmitted to the first transmitting/receiving apparatus, size of upstream data to be transmitted, and filtering information concerning received downstream data.

11-13. (Canceled)

14. (Previously Presented) In a communication system in which program data is transmitted through a communication network to a client, the system comprising a server, at least one client and a filter unit, the filter unit comprising:

- a processor for controlling the filter unit entirely;
- a first interface for receiving program data and schedule data from the server;
- a second interface for receiving request information from the client;
- a filter circuit for forwarding the program data indicated by the schedule to be received at the client;
- a third interface for transmitting the program data forwarded by the filter circuit;
- an analog/digital (A/D) converter for converting the schedule data received through the first interface and the filter circuit into a digital form;
- a fourth interface for receiving information for filtering the program data; and
- a second filter for filtering data from the client to the server in accordance with schedule data transmitted from the client.